AMP51Pure User Manual

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1 Main Menu

1.1 Volume

Press in the main menu Fup or Fdown until "Volume" is displayed. Adjust now the volume with the encoder to the desired value in the range from -96 to 15.5 dB.

If "Input" is selected in the main menu, the volume can be increased with Select and decreased with Exit in 2.5 dB steps.

1.2 Input Selection

Press in the main menu Fup or Fdown until "Input" is displayed. Select now the input with the encoder. In the lower right corner of the display the preamplification is shown. If the input is mono, in the upper right corner "mono" is displayed[1] and the mono LED will be on.

If "Volume" is selected in the main menu, the input can be changed with Select and Exit.

1.3 Options

Press in the main menu Fup or Fdown until "Option" is displayed. Press now Select. To get back to the main menu press Exit one or more times, corresponding to the nesting of the sub menu.

[1] 2*20 character LCD only

1.4 Mute

Press the mute button to switch off the output. To activate the output, press Mute again.

1.5 Standby

To toggle between power on and standby mode, press in the main menu the standby button. In the standby mode the display back light can be switched on and off with the mute button.

1.5.1 One Time Timer in the Standby Mode

To adjust the One Time Timer, press in the standby mode Select. Now the time will be displayed, at which the amp will switch itself one time on. Note that this is the absolute time. Select with Fup and Fdown the digit. The encoder is used to adjust the value of the digit. To activate the alarm, leave the menu with Select. Use Exit to deactivate the alarm and leave the menu. When the One Time Timer is active,

“OTT" will be visible in the lower right corner of the display.

2 The Option Menu

2.1 Preamplification

For each input an individual preamplification factor between 0 and 15.5 dB can be set. Press in the option menu Fup or Fdown until “Gain” is displayed. Press now Select. In the first line of the display now the name of the input is shown. In the second line the gain is displayed. Select now with Fup or Fdown the input and adjust with the encoder the preamplification. Select with Mute between mono and stereo mode. With the Standby button the input channel can be deactivated. A deactivated channel is marked by “disabled” and will be hidden in the main menu.

2.2 Naming of the Inputs

For each input a name with an maximum length of 16 charters can be given. Press in the option menu Fup or Fdown until “Input Name” is displayed. Press now Select. In the second line of the display now the name of the input is shown. Select now with Fup or Fdown the input and press the select. Select now with Fup and Fdown the digit and adjust with the encoder the charter. mute sets the actual charter to space.

2.3 Balance

For the left or the right output an attenuation between 0 and 64 can be set. Press in the option menu Fup or Fdown until “Balance” is displayed. Now select the desired attenuation via the encoder. Mute resets to neutral. If the position is not neutral a “B” will be displayed in the lower right corner of the display[2] and the balance LED will be on.

2.4 Address of the Remote Control

To use the remote control of other devices, the remote control address can be set. Press in the option menu Fup or Fdown until “Select RC” is displayed. Press now Select and afterward any key at the remote control. Now the device address as well as the key code is shown. The device address is used for the amplifier, while the key code is just displayed for your information.

2.5 Power Up Status

When the power supply is switched on, the device can enter standby or power up mode. To adjust this, press in the option menu Fup or Fdown until “Power up Status” is displayed. Press now Select. Then select with Fup or Fdown the mode.

2.6 Set the Clock

To adjust the clock, press in the option menu Fup or Fdown, until “Set Clock" is displayed. Press now Select. Then the time can be adjusted. Use Fup and Fdown to select the digit and the encoder to adjust the value. Confirm the setting with Select. Now the date can be adjusted in the

[2] 2*20 character LCD only

same way. After confirmation of the date the week day can be set via the encoder. When now Select is pressed, the years until the next leap year can be entered. Now press again Select to get back to the option menu.

2.7 Programming of the Alarms

To adjust an alarm, press in the option menu Fup or Fdown until “Set Alarm" is displayed. Press now Select. Select now with Fup or Fdown an alarm and confirm with Select. Adjust now first volume, then input, time and week day. Confirm the week day with Select to activate the alarm. Press Exit to leave and deactivate the alarm.

2.8 Adjust the Sleep Timer

To adjust the sleep timer, press in the option menu Fup or Fdown until “Sleep” is displayed. Press now Select. Now the time will be displayed, at which the amp will switch itself one time off. Note that this is the absolute time. Select with Fup or Fdown the digit and adjust the value with the encoder. Confirm and activate the sleep timer with Select. Press Exit to leave the menu and deactivate the sleep timer. In the main menu a “S” is displayed in the upper right corner of the display[3], when the sleep timer is active.

[3] 2*20 character LCD only

2.9 Dynamic Step Size Control

To access the wide adjustment range quickly, a dynamic step size control is implemented in the software. The presets are Step Dynamic 9 steps and Clear Step Time 2 seconds.

2.9.1 Step Dynamic

Step dynamic is the speed with which the step size increases when the same key is pressed several times. Press in the option menu Fup or Fdown until “Step Dynamic" is displayed. Press now Select and adjust afterward via the encoder the step dynamic. A high value corresponds to a low acceleration.

2.9.2 Clear Step Time

Clear step time is the time, after which the step size is reset to one. Press in the option menu Fup or Fdown until “Clear Step Time" is displayed. Press now Select. Then the value is adjustable via encoder.

2.10 Display Clock

Here the user can control, if the time and date are shown on the first line of the display after one minute of inactivity. Press in the option menu Fup or Fdown until “Display Clock" is displayed. Press now Select. Then select with Fup or Fdown the mode.

2.11 Fluorescence Display

The following options are only available, when a fluorescence display is used.

2.11.1 Brightness

The brightness for power on and standby mode is individually adjustable. Press in the option menu Fup or Fdown until “Brightness" or “Stdby Brightness" is displayed. Press now Select. The brightness of the corresponding mode can now be adjusted via the encoder. A low standby brightness is recommended to increase the lifetime of the display.

2.11.2 Display On-Time

Here the user can control, if and in case after which time the fluorescence display is powered down during standby. Press in the option menu Fup or Fdown until “Display On-Time" is displayed. Press now Select. Then the value in minutes is adjustable via encoder. Mute sets the value to “disabled”.

3 Further Information

- At the rec-output is the preamplified signal available. It is independent of volume and attenuation settings.
- Only RC5 remote control units are supported. This code is supported by most programmable remote controls.
- The device can be reset to factory defaults, when Fup and Fdown are pressed during, while the power is switched on. To prevent an unintended reset the key Tsel has to be pressed when the question “Reset device to default?” appears.
- If the settings get corrupted during power-off, a reset is forced and the message “Device reset / Check battery” is displayed. The warning has to be acknoledged by pressing any key. It is recommended to replaces the battery as soon as possible.
- If the amplifier is driven to hard, the message “Clipping" will be shown in the display and the volume will be decreased automatically. A suitable signal is produced by for example TDA7293.
- If an error occurs, the amplifier is switched off and the message “Amp switched off" is displayed.
- The remote control is blocked while the option menu or any security function is active.
- Alarms and One Time Timer are executed only in the standby mode.
- Sleep is executed only in the main menu.
- Sleep and One Time Timer are deactivated only after execution.
- This description is for the software version 17.
- Calculation of the volume value:

$$
\begin{aligned}
B &= Balance \\
N &= Neutral \\
Vol_{eff} &= Volume + Gain \\
Vol_R &= \begin{cases} Vol_{eff}\frac{B}{N}, & \text{for } B < N \\ Vol_{eff}, & \text{other} \end{cases} \\
Vol_L &= \begin{cases} Vol_{eff}, & \text{for } B < N \\ Vol_{eff}\frac{2N-B}{N}, & \text{other} \end{cases}
\end{aligned}
$$

- Balance display:

$$Value = \begin{cases} N - B, & \text{for } B < N \\ \text{neutral}, & \text{for } B = N \\ B - N, & \text{other} \end{cases}$$